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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,170	12/29/2005	Peter Le Lievre	P 1147.15007	3694

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EXAMINER	
BASICHAS, ALFRED	
ART UNIT	PAPER NUMBER
3743	
MAIL DATE	DELIVERY MODE
12/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/563,170	LE LIEVRE, PETER	
	Examiner	Art Unit	
	Alfred Basichas	3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 December 2005*.

2a)☒ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-29 and 31-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-29 and 31-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/31/09,11/3/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 16-29 and 31-38 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 18-33 of copending Application No. 10/563,171. Although the conflicting claims are not identical, they are not patentably distinct from each other because they recite the same general invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 16, 19-23, 25, 29, and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sick (4,820,033) in view of Funger (6,543,441). Sick teaches substantially all of the claimed limitations. For example:

A carrier and drive arrangement for use in a solar energy reflector system and which comprises: a) a carrier structure having i) a platform 11 for supporting a reflector element 15, ii) a frame portion that includes hoop-like end members 26 between which the platform extends, and iii) support members 29,30 which support the frame portion by way of the end members and which accommodate turning of the carrier structure about an axis of rotation that is substantially coincident with a longitudinal axis of the reflector element when supported by the

platform; and b) a drive system incorporating an electric motor for imparting turning drive to the carrier structure (see at least col. 3, line 67 - col. 4, line 4), wherein the platform comprises a panel-like platform (see at least figs. 1-3) which is formed with stiffening elements 12,24 in the form of corrugations and wherein the reflector element is supported upon the crests of the corrugations, wherein the platform comprises a panel-like platform which is formed with stiffening elements in the form of flutes 12,24 and wherein the reflector element is supported upon the crests of the flutes, wherein the stiffening elements are orientated to extend in a direction parallel to the longitudinal axis of the reflector element (see at least figs. 1-3), wherein the stiffening elements are oriented to extend in a direction parallel to the longitudinal axis of the reflector element (see at least figs. 1-3), wherein the platform is curved concavely in a direction orthogonal to the longitudinal axis of the reflector element (see at least figs. 1-3), wherein the reflector element is secured to the platform in a manner such that the curvature of the platform is imparted to the reflector element (see at least figs. 1-3).

Nevertheless, Sick does not specifically recite the claimed channel/roller arrangement. Funger teaches a solar collector including a channel/roller arrangment (see at least fig. 12). Such an arrangement clearly provides for effective load bearing and weight distribution. Accordingly, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate the channel/roller as taught by Funger into the invention disclosed by Sick, so as to provide effective load bearing and weight distribution.

6. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sick (4,820,033) in view of Funger (6,543,441), and further in view of Butler (4,559,926). Sick discloses substantially all of the claimed limitations. While the combination of Sick and Funger teaches a transmission of motion from the electric motor acting on the periphery of he circular ring 26 (Sick), it does not specifically recite

imparting drive by one of the end members. Butler teaches a solar collector drive arrangement including hoop element 18, with surrounding fixed chain 30, end members 20, and motor 22 driving the hoop element via the end member (see at least figs. 2,3). Butler teaches that such an arrangement provides a low cost drive system (see at least col. 1, lines 45-48). Accordingly, it would have been obvious to one having ordinary skill in the art at the time of invention to incorporate the drive details taught by Butler into the invention taught by Sick in view of Funger, so as to provide a low cost drive system.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sick (4,820,033) in view of Funger (6,543,441), which combination teaches substantially all of the claimed limitations. While Sick inherently includes a radius of curvature to enhance the concentration of sun light, Sick does not specifically recite the claimed range. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the claimed range into the invention taught by Sick in view of Funger, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable values or ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233; *In re Swain,* 156 F.2d 239. See also Peterson, 315 F.3d at 1330, 65 USPQ2d at 1382 ("The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages.").

8. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sick (4,820,033) in view of Funger (6,543,441), which combination teaches substantially

all of the claimed limitations. While Sick discloses metal mirrors, Sick does not specifically recite the use of glass mirrors. Official Notice is given that the use of glass mirrors in solar concentrators is old and well known in the art. Such an arrangement has the clear and obvious benefit of providing for efficient reflection and concentration of sunlight. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate glass mirrors into the invention taught by Sick in view of Funger, so as to provide for efficient reflection and concentration of sunlight.

Response to Arguments

9. Applicant's arguments with respect to the claim have been considered. However, in view of the amendments to the claims the arguments regarding the previous rejections are moot in view of the new grounds of rejection necessitated thereby.

a. In response to applicant's arguments against Sick and Funger individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

b. The examiner's assertion of Official Notice is taken to be admitted prior art in view of applicants' non-traversal of the assertion. MPEP 2144.03. The examiner appreciates applicants' waiver and efforts to expedite prosecution of the instant invention by avoiding unnecessary deliberations of well known aspects of the art.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 571 272 4871. The examiner can normally be reached on Monday through Friday during regular business hours.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center telephone number is 571 272 3700.

December 1, 2009

/Alfred Basichas/
Primary Examiner, Art Unit 3743